

✓ --12. A process for producing water-soluble or water-swellaable synthetic polymer products by free-radical polymerization in aqueous solution of acrylic acid and/or acrylic acid derivatives partially or completely neutralized with basic nitrogen compounds, wherein exceedingly low residual monomer levels are achieved by subsequent heating of the polymer products at a temperature of from 120 to 240°C.

13. The process according to claim 12, wherein said nitrogen compound is selected from the group consisting of ammonia, ammonium hydroxide, hydroxylamine, alkanolamines, alkylamines and mixtures thereof.

14. The process according to claim 12, wherein said nitrogen compound is selected from the group consisting of ammonia, ammonium hydroxide, mono-ethanolamine and di-ethanolamine.

15. The process according to claim 12, wherein the acid monomer component is neutralized with said nitrogen compound up to a neutralization level of from 10 to 100%.

16. The process according to claim 12, wherein monomers based on acrylic acid, methacrylic acid or derivatives of these carboxylic acids are subjected to polymerization,

17. The process according to claim 12, wherein monomers based on homo- or copolymers of acrylic, methacrylic acid, acrylamidopropanesulfonic acid, alkali or ammonium salts of these carboxylic acids, of acryl- or methacrylamide and derivatives thereof, of vinylpyrrolidone, and as copolymers of each other, or are used with other, only partially water-soluble monomers are subjected to polymerization

18. The process of Claim 12, wherein said partially water-soluble monomer is vinyl acetate.

19. The process according to claim 12, wherein at least one crosslinker based on a bi- or polyfunctional monomer is used in addition.

20. The process according to claim 12, wherein the polymer product is heated at a temperature of from 140 to 180°C.

21. The process according to claim 12, wherein polymer products having a content of residual monomer of less than 50 ppm are formed.

22. The process according to claim 12, wherein polymer products having a content of residual monomer of less than 30 ppm are formed.

23. The process according to claim 12, wherein polymer products having a residual content of acrylamide of less than 10 ppm are formed.

REMARKS

Claims 12-23 are active in the present application. Support for Claims 12-23 is found in Claims 1-11 and the specification as originally filed. No new matter is believed to have been introduced by the amendments submitted above.